

Amendments to the Specification:

Please **replace** the paragraph beginning at page 20, line 21, with the following:

--The effect of an inhibitor of μ -calpains, CI-1 (N-acetyl-leu-leu-norleucinal), was investigated for its ability to enhance p53 mediated apoptosis in tumor cell lines having p53+ and p53- status listed in Table1. Each cell line was treated with 5-50 μ M CI-1 for 17-26 hours. To detect a G0/G1 block, bromodeoxyuridine (BrdU) incorporation followed by flow cytometric analysis was done 17 hours post-treatment as described in Example 4 herein. In response to 17 hours of treatment, bromodeoxyuridine labeling showed wildtype, but not mutated p53 cell lines arrested in G0/G1. Annexin V-FITC and propidium iodide staining (as more fully described in ~~Example~~ Example 3 herein) was then used to determine if the cells were induced to apoptosis. Wildtype p53 tumor cell lines, but not mutated or null, were sensitive to CI-1 induced apoptosis, as assayed 26 hours post-treatment by annexin V-FITC and propidium iodide staining, suggesting activation of a p53 dependent apoptotic pathway in response to CI-1 treatment. The results of these experiments are presented in Figures 1 and 2 of the attached drawings. In figure 1, each point on the graph represents percentage annexin V positive after background percentage (DMF alone) was subtracted. The results of these experiments is presented in Table 3 below:--

Please **replace** the paragraph beginning at page 29, line 6, with the following:

--Nuclear Factor Kappa B (NFkB) was initially thought to be active only in B cells where it binds to a specific DNA sequence (GGGGACTTCC; SEQ ID NO:1) within the immunoglobulin light chain kappa enhancer region in mice and humans. However, later studies have demonstrated that NFkB is an inducible factor which is present in a wide variety of cell types. This factor regulates the transcription of a wide variety of cellular and viral genes including c-myc, the interleukins, receptors, adhesion molecules, p53 and the CMV early promoter. This factor is induced in response to a variety of primarily pathogenic stimuli including IL-1, TNF- α , adhesion, bacterial lipopolysaccharides (LPS), and oxidative stress.

Because induction of NFkB is blocked by antioxidants, it is believed that activation of NFkB employs reactive oxide intermediates (ROIs) as intracellular second messengers in response to the above stimuli.--

Please **replace** the paragraph beginning at page 42, line 17, with the following:

--Taqman® EZ RT-PCR core reagents (rTth DNA polymerase, AmpErase UNG, deoxy ATP, deoxy CTP, deoxy GTP, deoxy UTP, 5x Taqman® EZ buffer, and manganese acetate solution) were obtained from Perkin-Elmer, as Part No. N808-0236. Oligonucleotide Primer "A" (5' Taqman® p53 5'- AACGGTACTCCGCCACC; SEQ ID NO:2) and Primer "B" (3' Taqman® p53; 5'- CGTGTCACCGTCGTGGA; SEQ ID NO:3) and 10 µM Taqman® Probe (5'-FAM-CAGCTGCTCGAGAGGTTTTCCGATCC-TAMRA; SEQ ID NO:4) were obtained from Perkin Elmer. Diethyl pyrocarbonate (DEPC) treated water was obtained from United States Biochemical Cat. No. 70783 or equivalent.). tRNA was obtained from Sigma Cat. No. R5636, 10 µg/ml.--

Please **replace** the paragraph beginning at page 43, line 15, with the following:

--The following materials were obtained from Perkin Elmer Corporation under Part No. N808-0028: Gene Amp 10X Taqman Buffer A, 25 mM MgCl₂, 5 µM Oligonucleotide Primer "A", 5 µM Oligonucleotide Primer "B", 5 units/µL AmpliTaq® Gold DNA Polymerase, 10 µM Taqman Probe. Deoxynucleotide Triphosphates, dATP, dCTP, and dGTP are 10 mM. dUTP is 20 mM. Equal volumes of dNTPs were combined to give a concentration of 2.5 mM for dATP, dCTP, and dGTP and a concentration of 5 mM for dUTP. (Perkin Elmer Part No. N808-0095) and 1 unit/µL Uracil-N-glycosylase (UNG) (Perkin Elmer, Part No. N808-0096). Diethyl Pyrocarbonate (DEPC) treated water was obtained from United States Biochemical (Cat. No. 70783. The following primers and probe were used p53 PCR Primer "A" (5' Taqman p53) from 5'-3' is AAC GGT ACT CCG CCA CC (SEQ ID NO:2); Primer "B" (3' Taqman p53) from 5'-3'

Appl. No. 09/416,735
Amdt. dated October 15, 2004
Reply to Office Action of March 25, 2004

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is ~~CGT GTC ACC GTC GTG GAA~~ CGT GTC ACC GTC GTG GA (SEQ ID NO:3); Taqman probe (p53 Taqman Probe) from 5'-3' is FAM-CAG CTG CTC GAG AGG TTT TCC GAT CC-TAMRA (SEQ ID NO:4). The following primers and probe were used for B-Actin PCR.; Sequence of Primer "A" (5' Taqman B-Actin) from 5'-3' is TCA CCC ACA CTG TGC CCA TCT ACG A (SEQ ID NO:5); Primer "B" (3' Taqman B-Actin) from 5'-3' is CAG CGG AAC CGC TCA TTG CCA ATG G (SEQ ID NO:6); Taqman probe (B-Actin Taqman Probe) from 5'-3' is FAM-ATG CCC CCC CCA TGC CAT CCT GCG T-TAMRA (SEQ ID NO:7).--

Please **insert** the accompanying paper copy of the Sequence Listing, page numbers 1-3, at the end of the application.